WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Tuesday, September 14, 2004

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ		
☐	L6	TSP1 same peptide	27
☐	L5	KRUTZSCH-HENRY.in.	7
☐	L4	L3 and tsp1	0
☐	L3	ROBERTS-DAVID.in.	66
	DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=ADJ		
☐	L2	5789184.pn.	1
☐	L1	5770563.pn.	1

END OF SEARCH HISTORY

h e b b cg b chh e f c e h

us-10-030-735-53.rag

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: April 7, 2004, 18:56:40 ; Search time 24.7731 Seconds
(without alignments)
45.622 Million cell updates
/sec

Title: US-10-030-735-53
Perfect score: 20
Sequence: 1 QVRF 4

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 150 summaries

Database : A_Geneseq_29Jan04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	% Query

No.	Score	Match	Length	DB	ID	Description
1	20	100.0	7	4	AAU03306	Aau03306 Fruit fly
2	20	100.0	7	7	ADE14636	Ade14636 Dm GPCR bi
3	20	100.0	9	2	AAW72575	Aaw72575 Glycosami
4	20	100.0	9	5	ABJ04513	Abj04513 HUVEC cel
5	20	100.0	11	2	AAW69636	Aaw69636 Peptide S
6	20	100.0	11	2	AAW74433	Aaw74433 Ste2 agon
7	20	100.0	11	3	AAY93629	Aay93629 Peptide e
8	20	100.0	11	3	AAB20743	Aab20743 MF-alpha-
9	20	100.0	11	4	AAG79161	Aag79161 Amino aci
10	20	100.0	11	4	AAB84509	Aab84509 Amino aci
11	20	100.0	11	6	ABU10263	Abu10263 Alpha-fac
12	20	100.0	12	4	AAB35379	Aab35379 Alpha3bet
13	20	100.0	12	5	AAU96875	Aau96875 Human pro
14	20	100.0	12	6	ABP76487	Abp76487 Peptidomi
15	20	100.0	15	5	ABG72342	Abg72342 Human pro
16	20	100.0	33	4	AAM17702	Aam17702 Peptide #
17	20	100.0	33	4	ABB36725	Abb36725 Peptide #
18	20	100.0	33	4	AAM30216	Aam30216 Peptide #
19	20	100.0	33	4	ABB31514	Abb31514 Peptide #
20	20	100.0	33	4	AAM05364	Aam05364 Peptide #
21	20	100.0	36	2	AAY42735	Aay42735 Human alp
22	20	100.0	44	6	ABP80500	Abp80500 N. gonorr
23	20	100.0	44	6	ABP77440	Abp77440 N.

gonorr						
24	20	100.0	48	3	AAB28082	Aab28082 Hu
man sec						
25	20	100.0	50	4	ABG21213	Abg21213 No
vel hum						
26	20	100.0	50	6	ABM65035	Abm65035 Pr
opionib						
27	20	100.0	53	4	AAU66685	Aau66685 Pr
opionib						
28	20	100.0	53	4	AAU47836	Aau47836 Pr
opionib						
29	20	100.0	53	6	ABM44355	Abm44355 Pr
opionib						
30	20	100.0	53	6	ABM63204	Abm63204 Pr
opionib						
31	20	100.0	54	3	AAB23638	Aab23638 Hu
man sec						
32	20	100.0	54	5	ABP08778	Abp08778 Hu
man ORF						
33	20	100.0	55	5	ABP06395	Abp06395 Hu
man ORF						
34	20	100.0	56	4	AAU39161	Aau39161 Pr
opionib						
35	20	100.0	56	5	ABP01166	Abp01166 Hu
man ORF						
36	20	100.0	56	6	ABM35680	Abm35680 Pr
opionib						
37	20	100.0	57	5	ABP33289	Abp33289 Hu
man ORF						
38	20	100.0	58	4	AAM19377	Aam19377 Pe
ptide #						
39	20	100.0	58	4	ABB38762	Abb38762 Pe
ptide #						
40	20	100.0	58	4	AAM32235	Aam32235 Pe
ptide #						
41	20	100.0	58	4	ABB23805	Abb23805 Pr
otein #						
42	20	100.0	58	4	AAM71956	Aam71956 Hu
man bon						
43	20	100.0	58	4	AAM59401	Aam59401 Hu
man bra						
44	20	100.0	58	4	ABG53640	Abg53640 Hu
man liv						
45	20	100.0	58	5	ABG41771	Abg41771 Hu
man pep						
46	20	100.0	64	7	ADC95207	Adc95207 E.
faeciu						
47	20	100.0	69	4	ABB15694	Abb15694 Hu

man ner						
48	20	100.0	69	5	ABP05088	Abp05088 Hu
man ORF						
49	20	100.0	72	4	AAU61842	Aau61842 Pr
opionib						
50	20	100.0	72	6	ABM58361	Abm58361 Pr
opionib						
51	20	100.0	73	5	ABP03846	Abp03846 Hu
man ORF						
52	20	100.0	75	3	AAG18731	Aag18731 Ze
a mays						
53	20	100.0	78	2	AAY00185	Aay00185 En
terococ						
54	20	100.0	78	5	ABP43404	Abp43404 E
faecali						
55	20	100.0	78	6	ABU88432	Abu88432 E.
faecal						
56	20	100.0	78	6	ABU13683	Abu13683 En
terococ						
57	20	100.0	81	5	ABG72341	Abg72341 Hu
man pro						
58	20	100.0	82	4	AAB63599	Aab63599 Hu
man gas						
59	20	100.0	82	5	ABP35151	Abp35151 Hu
man tra						
60	20	100.0	82	6	ABP79077	Abp79077 N.
gonorr						
61	20	100.0	87	4	AAU48135	Aau48135 Pr
opionib						
62	20	100.0	87	6	ABM44654	Abm44654 Pr
opionib						
63	20	100.0	90	3	AAB32959	Aab32959 Pi
nus rad						
64	20	100.0	91	4	AAM88645	Aam88645 Hu
man imm						
65	20	100.0	91	4	AAU61765	Aau61765 Pr
opionib						
66	20	100.0	91	6	ABM58284	Abm58284 Pr
opionib						
67	20	100.0	92	3	AAB57215	Aab57215 Hu
man pro						
68	20	100.0	92	7	ADB99960	Adb99960 En
terohae						
69	20	100.0	93	4	ABG10986	Abg10986 No
vel hum						
70	20	100.0	95	5	ABP09683	Abp09683 Hu
man ORF						
71	20	100.0	100	3	AAY95699	Aay95699 Co

smid cH						
72	20	100.0	101	3	AAG22872	Aag22872 Ar
abidops						
73	20	100.0	101	4	AAM06501	Aam06501 Hu
man foe						
74	20	100.0	101	5	ABB49947	Abb49947 Li
steria						
75	20	100.0	102	3	AAG22871	Aag22871 Ar
abidops						
76	20	100.0	102	5	ABB48631	Abb48631 Li
steria						
77	20	100.0	102	6	ABP79162	Abp79162 N.
gonorr						
78	20	100.0	105	2	AAY00184	Aay00184 En
terococ						
79	20	100.0	105	5	ABP43403	Abp43403 E
faecali						
80	20	100.0	105	6	ABU88431	Abu88431 E.
faecal						
81	20	100.0	105	6	ABU13682	Abu13682 En
terococ						
82	20	100.0	111	5	ABP33493	Abp33493 Hu
man ORF						
83	20	100.0	115	7	ADC95439	Adc95439 E.
faeciu						
84	20	100.0	120	4	AAM82492	Aam82492 Hu
man imm						
85	20	100.0	120	7	ADB65146	Adb65146 Hu
man pro						
86	20	100.0	121	4	AAO01145	Aao01145 Hu
man pol						
87	20	100.0	122	3	AAG43679	Aag43679 Ar
abidops						
88	20	100.0	122	3	AAG08770	Aag08770 Ar
abidops						
89	20	100.0	124	4	ABG02989	Abg02989 No
vel hum						
90	20	100.0	125	3	AAG08769	Aag08769 Ar
abidops						
91	20	100.0	125	3	AAG43678	Aag43678 Ar
abidops						
92	20	100.0	126	3	AAG37071	Aag37071 Ar
abidops						
93	20	100.0	128	4	ABB17813	Abb17813 Hu
man ner						
94	20	100.0	129	4	AAB79154	Aab79154 Co
rynebac						
95	20	100.0	131	6	ABP72618	Abp72618 Sn

owdrop						
96	20	100.0	132	1	AAP70411	Aap70411 OR
F 8 gen						
97	20	100.0	132	3	AAG22870	Aag22870 Ar
abidops						
98	20	100.0	133	3	AAG18737	Aag18737 Ze
a mays						
99	20	100.0	133	4	ABG16090	Abg16090 No
vel hum						
100	20	100.0	135	4	AAO01000	Aao01000 Hu
man pol						
101	20	100.0	135	6	ADA34622	Ada34622 Ac
inetoba						
102	20	100.0	138	4	ABG22359	Abg22359 No
vel hum						
103	20	100.0	142	5	ABG70554	Abg70554 A.
oryzae						
104	20	100.0	142	5	ABG70552	Abg70552 A.
oryzae						
105	20	100.0	143	5	ABP32659	Abp32659 Hu
man hel						
106	20	100.0	144	4	AAU40695	Aau40695 Pr
opionib						
107	20	100.0	144	6	ABM37214	Abm37214 Pr
opionib						
108	20	100.0	150	7	ADC89121	Adc89121 Ri
bosomal						
109	20	100.0	150	7	ADC89101	Adc89101 Ri
bosomal						
110	20	100.0	150	7	ADC89112	Adc89112 Ri
bosomal						
111	20	100.0	150	7	ADC89125	Adc89125 Ri
bosomal						
112	20	100.0	150	7	ADC89113	Adc89113 Ri
bosomal						
113	20	100.0	150	7	ADC89108	Adc89108 Ri
bosomal						
114	20	100.0	151	4	ABB68111	Abb68111 Dr
osophil						
115	20	100.0	151	4	AAU28021	Aau28021 No
vel hum						
116	20	100.0	151	6	ABR64246	Abr64246 An
giogene						
117	20	100.0	151	7	ADC89100	Adc89100 Ri
bosomal						
118	20	100.0	153	3	AAB44136	Aab44136 Hu
man can						
119	20	100.0	154	4	ABG00143	Abg00143 No

vel hum						
120	20	100.0	157	3	AAG19952	Aag19952 Ar
abidops						
121	20	100.0	157	3	AAG48125	Aag48125 Ar
abidops						
122	20	100.0	157	3	AAG23291	Aag23291 Ar
abidops						
123	20	100.0	158	4	ABG02986	Abg02986 No
vel hum						
124	20	100.0	162	2	AAY60114	Aay60114 Hu
man end						
125	20	100.0	162	7	ADC33053	Adc33053 Hu
man nov						
126	20	100.0	163	4	AAU55378	Aau55378 Pr
opionib						
127	20	100.0	163	6	ABM51897	Abm51897 Pr
opionib						
128	20	100.0	165	4	AAU19364	Aau19364 Hu
man G p						
129	20	100.0	166	4	AAU17657	Aau17657 No
vel sig						
130	20	100.0	166	7	ADB94365	Adb94365 Hu
man nov						
131	20	100.0	167	3	AAY75563	Aay75563 Ne
isseria						
132	20	100.0	167	3	AAY75562	Aay75562 Ne
isseria						
133	20	100.0	167	5	ABU05887	Abu05887 M.
tuberc						
134	20	100.0	167	6	ABP57498	Abp57498 My
cobacte						
135	20	100.0	167	6	ABU54889	Abu54889 Me
tabolic						
136	20	100.0	169	3	AAY74781	Aay74781 Ne
isseria						
137	20	100.0	171	4	AAB92451	Aab92451 Hu
man pro						
138	20	100.0	173	3	AAB15952	Aab15952 E.
coli p						
139	20	100.0	173	6	ABU28383	Abu28383 Pr
otein e						
140	20	100.0	173	6	ABU14714	Abu14714 Pr
otein e						
141	20	100.0	174	5	ABB48326	Abb48326 Li
steria						
142	20	100.0	175	6	ADA20733	Ada20733 Co
rn cyto						
143	20	100.0	176	6	ABJ18773	Abj18773 Ps

eudomon						
144	20	100.0	179	4	AAU49875	Aau49875 Pr
opionib						
145	20	100.0	179	6	ABM46394	Abm46394 Pr
opionib						
146	20	100.0	182	3	AAB58821	Aab58821 Br
east an						
147	20	100.0	186	3	AAG04032	Aag04032 Hu
man sec						
148	20	100.0	186	3	AAG24340	Aag24340 Ar
abidops						
149	20	100.0	187	7	ADC31395	Adc31395 Hu
man nov						
150	20	100.0	191	4	AAE13835	Aae13835 Hu
man lun						

ALIGNMENTS

RESULT 1
AAU03306
ID AAU03306 standard; peptide; 7 AA.
XX
AC AAU03306;
XX
DT 12-SEP-2001 (first entry)
XX
DE Fruit fly G protein coupled receptors, DmGPCR6aL/bL ligand #55.
XX
KW Fruit fly; G protein coupled receptor; DmGPCR6aL/bL;
KW human immunodeficiency virus; HIV; cancer; Parkinson's disease; d
iabetes;
KW obesity; atherosclerosis; thrombosis; stroke; renal failure;
KW inflammation; rheumatoid arthritis; autoimmune disorder;
KW neurological disorder; schizophrenia; manic depression; dementia;
KW severe mental retardation; dyskinesia; Huntington's disease;
KW Tourette's syndrome; ligand.
XX
OS Drosophila melanogaster.
XX
FH Key   Location/Qualifiers
FT Modified-site   7
FT   /note= "C-terminus is amidated"
XX
PN WO200131005-A2.
XX
PD 03-MAY-2001.

XX
PF 20-OCT-2000; 2000WO-US029002.
XX
PR 22-OCT-1999; 99US-00425676.
XX
PA (PHAA) PHARMACIA & UPJOHN CO.
XX
PI Lowery DE, Smith VG, Kubiak TA, Larsen MJ;
XX
DR WPI; 2001-316333/33.
XX
PT New Drosophila melanogaster GPCR nucleic acids and polypeptide us
eful for
PT inducing an immune response, for identifying homologs and for tre
ating
PT e.g. diabetes, obesity and manic depression.
XX
PS Example 9; Page 100; 110pp; English.
XX
CC The sequence is a fruit fly G protein coupled receptors, DmGPCR6a
L/bL,
CC peptide ligand. The proteins are useful for inducing an immune re
sponse
CC against itself in a mammal. The nucleic acids are useful for iden
tifying
CC an animal homolog of DmGPCR, by screening databases or libraries.
The
CC compounds identified as binding partners or modulators of GPCR bi
nding
CC are useful for treating diseases in animals, and for control inse
cts that
CC are harmful or cause injury to plants or animals. Diseases treate
d
CC include infections (e.g. viral and human immunodeficiency virus,
HIV),
CC cancer, pain, Parkinson's disease, hypotension, hypertension, dia
betes,
CC obesity, atherosclerosis, thrombosis, stroke, renal failure,
CC inflammation, rheumatoid arthritis, autoimmune disorders, and psy
chotic
CC and neurological disorders (anxiety, schizophrenia, manic depress
ion,
CC delirium, dementia, severe mental retardation, dyskinesias, Hunti
ngton's
CC disease or Tourette's syndrome). The nucleic acids can be used fo
r
CC genetic mapping, and producing the GPCRs. Anti-GPCR antibodies ca
n be

```
CC   used in therapy, diagnostic assays and for modulating GPCR activi
ty
XX
SQ   Sequence 7 AA;

  Query Match             100.0%;  Score 20;  DB 4;  Length 7;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db          4 QVRF 7


RESULT 2
ADE14636
ID   ADE14636 standard; peptide; 7 AA.
XX
AC   ADE14636;
XX
DT   29-JAN-2004  (first entry)
XX
DE   DmGPCR binding ligand #90.
XX
KW   fruit fly; G-protein coupled receptor; DmGPCR; insect populatio c
ontrol;
KW   fly; tick; mite; flea; cockroach; ectoparasite; binding ligand.
XX
OS   Drosophila melanogaster.
XX
PN   US2003180297-A1.
XX
PD   25-SEP-2003.
XX
PF   06-AUG-2002; 2002US-00213821.
XX
PR   22-OCT-1999;   99US-00425676.
PR   20-OCT-2000; 2000US-00693746.
XX
PA   (LOWE/) LOWERY D E.
PA   (SMIT/) SMITH V G.
PA   (KUBI/) KUBIAK T M.
PA   (LARS/) LARSEN M J.
XX
PI   Lowery DE,  Smith VG,  Kubiak TM,  Larsen MJ;
XX
DR   WPI; 2003-843918/78.
```

```
XX
PT   Binding a Drosophila melanogaster G-protein coupled receptor with
 a
PT   binding partner or modulator is useful to control an insect popul
ation or
PT   to treat or prevent a disease or condition caused by ectoparasite
s.
XX
PS   Example 9; SEQ ID NO 114; 53pp; English.
XX
CC   The invention relates to a method of binding a Drosophila melanog
aster G-
CC   protein coupled receptor (DmGPCR) with a DmGPCR binding partner.
The
CC   invention is used to control an insect population, particularly a
 fly,
CC   fruit fly, tick, mite, flea or cockroach population, or to treat
or
CC   prevent a disease or condition caused by ectoparasites, particula
rly in a
CC   companion animal, livestock, horse or a human. The present sequen
ce
CC   represents the amino acid sequence of a Drosophila melanogaster G
-protein
CC   coupled receptor, DmGPCR binding ligand.
XX
SQ   Sequence 7 AA;

  Query Match             100.0%;  Score 20;  DB 7;  Length 7;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db          4 QVRF 7


RESULT 3
AAW72575
ID   AAW72575 standard; peptide; 9 AA.
XX
AC   AAW72575;
XX
DT   06-JAN-1999  (first entry)
XX
DE   Glycosaminoglycan sulphate group transferase peptide #2.
XX
```

KW Glycosaminoglycan sulphate group transferase; chinese hamster;
KW L-iduronic acid residue; sulphate group receptor glycosaminoglyca
n;
KW heparan sulphate 2-0-sulphate group transferase; HS2ST.
XX
OS Homo sapiens.
OS Cricetulus sp.
XX
PN JP10257896-A.
XX
PD 29-SEP-1998.
XX
PF 04-JUN-1997; 97JP-00146815.
XX
PR 17-JAN-1997; 97JP-00006522.
XX
PA (SEGK) SEIKAGAKU KOGYO CO LTD.
XX
DR WPI; 1998-575907/49.
XX
PT A polynucleotide encoding glycosaminoglycan sulphate group transf
erase -
PT useful for the recombinant production of the enzyme.
XX
PS Example 1; Page 10; 22pp; Japanese.
XX
CC The present sequence represent a peptide of glycosaminoglycan sul
phate
CC group transferase, from an example of the present invention. The
present
CC invention describes a DNA molecule coding at least part of a poly
peptide
CC of glycosaminoglycan sulphate group transferase having the 356 am
ino acid
CC sequence as shown in AAW72571 to AAW72573, and optionally having
a
CC replacement, deletion, or insertion of at least one amino acid (a
a)
CC residue but still retaining the enzymic activity of transferring
a
CC sulphate group from a sulphate group donor to the 2-OH of a L-idu
ronic
CC acid residue contained in a sulphate group receptor glycosaminogl
ycan.
CC The nucleic acid can be used for the recombinant production of th
e
CC enzyme, especially for the production of heparan sulphate 2-O-sul
phate

```
CC   group transferase (HS2ST)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 20;  DB 2;  Length 9;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db          2 QVRF 5


RESULT 4
ABJ04513
ID   ABJ04513 standard; peptide; 9 AA.
XX
AC   ABJ04513;
XX
DT   24-OCT-2002  (first entry)
XX
DE   HUVEC cell targeting CX7C targeting peptide 27.
XX
KW   BRASIL; targeting peptide; bacterial infection;
KW   Biopanning and Rapid Analysis of Selective Interactive Ligands; d
iabetes;
KW   inflammatory arthritis; atherosclerosis; cancer; autoimmune disea
se;
KW   viral infection; cardiovascular disease; degenerative disease.
XX
OS   Unidentified.
XX
PN   WO200220822-A2.
XX
PD   14-MAR-2002.
XX
PF   07-SEP-2001; 2001WO-US028124.
XX
PR   08-SEP-2000; 2000US-0231266P.
PR   17-JAN-2001; 2001US-00765101.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Arap W,  Pasqualini R;
XX
DR   WPI; 2002-404697/43.
XX
```

PT Identification of targeting peptides that can be used to treat di
seases
PT e.g. cancer and arthritis, by the BRASIL (Biopanning and Rapid An
alysis
PT of Selective Ligands) method comprises a single differential
PT centrifugation step.
XX
PS Example 2; Page 66; 167pp; English.
XX
CC The invention comprises a method (BRASIL - Biopanning and Rapid A
nalysis
CC of Selective Interactive Ligands) to obtain a targeting peptide.
The
CC BRASIL method of the invention involves: exposing a target to a p
hage
CC display library in a first phase; exposing the first phase to a s
econd
CC phase; and separating the phage bound to the target from unbound
phage.
CC The BRASIL method of the invention allows cell phages to be separ
ated
CC from the remaining unbound phage in a single differential centrif
ugation
CC step. When compared to conventional cell panning methods, the BRA
SIL
CC method shows a significant increase in recovery of specific phage
and a
CC substantial decrease in background. The BRASIL method is useful f
or
CC identifying targeting peptides. The targeting peptides identified
by the
CC method of the invention are useful for treating disease states, s
uch as:
CC diabetes; inflammatory arthritis; atherosclerosis; cancer; autoim
mune
CC disease; bacterial infection; viral infection; cardiovascular dis
ease and
CC degenerative disease. The present amino acid sequence represents
a
CC targeting peptide of the invention
XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 20; DB 5; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.4e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

```
Qy          1 QVRF 4
              ||||
Db          3 QVRF 6
```

RESULT 5
AAW69636
ID AAW69636 standard; peptide; 11 AA.
XX
AC AAW69636;
XX
DT 19-OCT-1998 (first entry)
XX
DE Peptide SEQ ID NO:55 from US5789184 Example 5.
XX
KW Yeast; Saccharomyces cerevisiae; pheromone; alpha factor; recepto
r;
KW surrogate; screening; selection.
XX
OS Synthetic.
XX
PN US5789184-A.
XX
PD 04-AUG-1998.
XX
PF 05-JUN-1995; 95US-00464531.
XX
PR 31-MAR-1993; 93US-00041431.
PR 31-JAN-1994; 94US-00190328.
PR 20-SEP-1994; 94US-00309313.
PR 13-OCT-1994; 94US-00322137.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Manfredi J, Murphy AJ, Fowlkes DM, Trueheart J, Klein C, Pau
l J;
PI Broach J;
XX
DR WPI; 1998-446076/38.
DR N-PSDB; AAV50007.
XX
PT Recombinant yeast cells - containing gene encoding yeast pheromon
e system
PT protein surrogate and gene encoding peptide modulator.
XX
PS Example 5; Col 123; 93pp; English.
XX
CC The present invention describes a yeast cell having a pheromone s

ystem,
CC in which the cell comprises: (a) a first heterologous gene encodi ng a
CC heterologous surrogate of a yeast pheromone system protein, the s urrogate
CC being a kinase and performing in the pheromone system of the yeas t cell a
CC function naturally performed by the corresponding yeast pheromone system
CC protein; and (b) a second heterologous gene encoding a heterologo us
CC peptide, where the heterologous peptide modulates the interaction of the
CC surrogate with the pheromone system in the yeast cell, and the mo dulation
CC is a selectable or screenable event. The yeast cells are used in assaying
CC a peptide for modulation of the activity of a non- yeast surrogat e for a
CC pheromone system protein and determining by detecting a change in the
CC selectable or screenable event whether the pheromone signal pathw ay is
CC activated or inhibited by the interaction of the surrogate and th e
CC peptide. The present sequence represents a peptide which is used in an
CC example of the present invention
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 90;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G aps 0;

```
Qy          1 QVRF 4
              ||||
Db          4 QVRF 7
```

RESULT 6
AAW74433
ID AAW74433 standard; peptide; 11 AA.
XX
AC AAW74433;
XX
DT 20-MAR-2003 (revised)

DT 10-MAY-1999 (first entry)
XX
DE Ste2 agonist peptide sequence.
XX
KW Yeast pheromone; Ste2 agonist; cognate yeast pheromone system protein;
KW farnesyl transferase; anticancer therapy.
XX
OS Synthetic.
XX
PN US5876951-A.
XX
PD 02-MAR-1999.
XX
PF 05-JUN-1995; 95US-00461598.
XX
PR 31-MAR-1993; 93US-00041431.
PR 31-JAN-1994; 94US-00190328.
PR 20-SEP-1994; 94US-00309313.
PR 13-OCT-1994; 94US-00322137.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Manfredi J, Murphy AJ, Fowlkes DM, Trueheart J, Klein C, Paul J;
PI Broach J;
XX
DR WPI; 1999-189631/16.
DR N-PSDB; AAX18223.
XX
PT Yeast cells having an engineered pheromone system - useful for
PT identifying drugs which can inhibit or activate pheromone system protein,
PT e.g. to develop anti-cancer therapies.
XX
PS Example 5; Col 61; 93pp; English.
XX
CC This sequence represents an Ste2 agonist peptide sequence. The invention
CC relates to Yeast cells engineered to express an exogenous protein capable
CC of substituting for a yeast protein involved in the post-translational
CC modification, transport, recognition or signal transduction of a yeast
CC pheromone. The system can be used to identify drugs which inhibit or
CC activate the ability of the surrogate to substitute for the cogna

te yeast
CC pheromone system protein. Inhibitors of farnesyl transferase iden
tified
CC can be used for anticancer therapies. (Updated on 20-MAR-2003 to
correct
CC PF field.)
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 90;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

```
Qy          1 QVRF 4
              ||||
Db          4 QVRF 7
```

RESULT 7
AAY93629
ID AAY93629 standard; peptide; 11 AA.
XX
AC AAY93629;
XX
DT 25-SEP-2000 (first entry)
XX
DE Peptide encoded by the insert of an a-factor variant.
XX
KW Surrogate ligand; formyl peptide receptor like-1 receptor;
KW FPRL-1 receptor; signal transduction; cellular receptor; a-factor
;
KW ABC transporter; ion channel.
XX
OS Synthetic.
XX
PN WO200031261-A2.
XX
PD 02-JUN-2000.
XX
PF 24-NOV-1999; 99WO-US027909.
XX
PR 25-NOV-1998; 98US-0109902P.
PR 30-NOV-1998; 98US-00201396.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Klein CA, Murphy AJ, Paul J;

XX
DR WPI; 2000-400071/34.
XX
PT Recombinant cell used to identify modulators of heterologous formyl
PT peptide receptor like-1 (FPRL-1) receptor, comprising FPRL-1 receptor
PT expressed in the cell membrane, and a FPRL-1 receptor ligand agonist.
XX
PS Example 5; Page 88; 156pp; English.
XX
CC AAY93628-31 represent peptides encoded by the inserts of a-factor

CC variants identified from random peptide libraries. These variants have
CC utility as improved substrates of ABC transporters expressed in yeast.
CC The specification describes a method for screening and identifying
CC pharmaceutically effective compounds which specifically interact with and
CC modulate the activity of a cellular receptor or ion channel. The method
CC uses a cells which expresses a heterologous formyl peptide receptor like-
CC 1 (FPRL-1) receptor in the cell membrane, so that extracellular signal
CC interaction with the receptors extracellular region modulates signal
CC transduction via the receptor. The cell is used in a method to screen and
CC identify pharmaceutically effective compounds which specifically interact
CC with and modulate the activity of a cellular receptor or ion channel,
CC especially the FPRL-1 receptor
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 3; Length 11;
Best Local Similarity 100.0%; Pred. No. 90;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4
||||
Db 4 QVRF 7

RESULT 8
AAB20743
ID AAB20743 standard; peptide; 11 AA.
XX
AC AAB20743;
XX
DT 21-DEC-2000 (first entry)
XX
DE MF-alpha-1 expression construct peptide SEQ ID NO:55.
XX
KW Yeast; pheromone; alpha-factor; transporter; pheromone receptor;
KW G alpha subunit; MF alpha 1; MFa1; STE2; STE3; C5a receptor; GPA1
;
KW G protein coupled receptor; mutagenesis; amplification; screening
;
KW hybrid; agonist; antagonist; signal transduction; detection;
KW identification.
XX
OS Saccharomyces cerevisiae.
OS Synthetic.
XX
PN US6100042-A.
XX
PD 08-AUG-2000.
XX
PF 13-OCT-1994; 94US-00322137.
XX
PR 31-MAR-1993; 93US-00041431.
PR 31-JAN-1994; 94US-00190328.
PR 20-SEP-1994; 94US-00309313.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Fowlkes DM, Broach J, Klein C, Murphy AJ, Paul J, Trueheart
J;
PI Manfredi J;
XX
DR WPI; 2000-531665/48.
XX
PT Mixture of recombinant yeast cells comprising a heterologous G pr
otein
PT coupled receptor whose signal transduction activity is modulated
by a
PT heterologous polypeptide which provides a detectable signal on
PT modulation.
XX

PS Example 5; Col 63; 95pp; English.
XX
CC The present invention describes recombinant yeast cell mixtures (I). Each
CC (I) has a heterologous G protein coupled receptor (GPCR) expresse d in the
CC cell membrane such that signal transduction (ST) activity via GPC R is
CC modulated by interaction of extracellular region (ER) of GPCR wit h a
CC heterologous polypeptide (P) which interacts with ER of receptor.

CC Modulation of the ST activity by (P) provides a detectable signal . Also
CC described is a recombinant yeast cell (II) that has a cell membra ne which
CC comprises a GPCR such that ST activity via GPCR is modulated by
CC interaction of an ER of GPCR with an extracellular signal, and a (P)
CC which is transported to a location allowing interaction with ER o f GPCR.
CC (I) is used for identifying a modulator of (P) expressed by the y east
CC cell which involves providing (I) which comprises heterologous GP CR and a
CC heterologous test polypeptide, allowing the cells within the mixt ure to
CC generate a detectable signal and then identifying the heterologou s test
CC peptide as a modulator of the heterologous receptor protein expre ssed by
CC the yeast cell. The yeast cells may be used to identify drugs whi ch
CC inhibit or activate, to a detectable degree, the ability of the s urrogate
CC to substitute for the cognate yeast pheromone system proteins. Th e yeast
CC cell is also used to screen agonists and antagonists. The present

CC sequence is used in the exemplification of the present invention
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 3; Length 11;
Best Local Similarity 100.0%; Pred. No. 90;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G aps 0;

```
Qy          1 QVRF 4
              ||||
Db          4 QVRF 7
```

RESULT 9
AAG79161
ID AAG79161 standard; peptide; 11 AA.
XX
AC AAG79161;
XX
DT 03-JAN-2002 (first entry)
XX
DE Amino acid sequence of an improved a-factor variant.
XX
KW Cellular receptor; ion channel; cellular activity; drug discovery
;
KW orphan receptor ligand; a-factor; ABC transporter.
XX
OS Synthetic.
XX
PN US2001026926-A1.
XX
PD 04-OCT-2001.
XX
PF 21-DEC-2000; 2000US-00747774.
XX
PR 31-MAR-1993; 93US-00041431.
PR 31-JAN-1994; 94US-00190328.
PR 20-SEP-1994; 94US-00309313.
PR 13-OCT-1994; 94US-00322137.
PR 05-JUN-1995; 95US-00461383.
PR 05-JUN-1995; 95US-00461598.
PR 05-JUN-1995; 95US-00463181.
PR 05-JUN-1995; 95US-00464531.
PR 17-JAN-1996; 96US-00582333.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Klein CA, Murphy AJ, Fowlkes DM, Broach J, Manfredi J, Paul
J;
PI Trueheart J;
XX
DR WPI; 2001-615870/71.
DR N-PSDB; AAI65750.
XX
PT Identification of compounds modulating cellular receptor activity
 useful

PT for identifying and screening for ligands for orphan receptors, comprises
PT using recombinant cells comprising both receptors and test polypeptide.
XX
PS Example 5; Page 33; 50pp; English.
XX
CC The specification describes an assay for screening and identifying
CC pharmaceutically effective compounds that specifically interact with and
CC modulate the activity of a cellular receptor or ion channel. The assay
CC uses a mixture of recombinant cells, each comprising a receptor protein
CC whose signal transduction activity is modulated by an interaction with an
CC extracellular signal, a recombinant gene encoding a potential receptor
CC polypeptide, and a reporter gene construct. The assay is useful for rapid
CC screening of large numbers of polypeptides to identify polypeptides
CC antagonizing or agonizing receptor activity, and to identify drugs for
CC modulating cellular activity. It is especially useful to identify ligands
CC for orphan receptors, especially ligands for orphan cell surface
CC receptors, which are useful in drug discovery. The present sequence
CC represents an improved a-factor variant, which is a better substrate for
CC ABC transporters. The variant was identified using the assay of the
CC invention
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 4; Length 11;
Best Local Similarity 100.0%; Pred. No. 90;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 QVRF 4
              ||||
Db          4 QVRF 7
```

RESULT 10
AAB84509
ID AAB84509 standard; peptide; 11 AA.
XX
AC AAB84509;
XX
DT 05-SEP-2001 (first entry)
XX
DE Amino acid sequence of a pheromone analogue.
XX
KW G protein coupled receptor; GPCR; cellular receptor; ion channel;
KW surrogate ligand; orphan receptor; pheromone analogue.
XX
OS Synthetic.
XX
PN US6255059-B1.
XX
PD 03-JUL-2001.
XX
PF 17-JAN-1996; 96US-00582333.
XX
PR 31-MAR-1993; 93US-00041431.
PR 31-JAN-1994; 94US-00190328.
PR 20-SEP-1994; 94US-00309313.
PR 13-OCT-1994; 94US-00322137.
PR 05-JUN-1995; 95US-00463181.
XX
PA (CADU-) CADUS PHARM CORP.
XX
PI Klein CA, Murphy AJM, Fowlkes DM, Broach J, Manfredi J, Paul J;
PI Trueheart J;
XX
DR WPI; 2001-396979/42.
DR N-PSDB; AAH27820.
XX
PT Identifying a ligand for an orphan G protein coupled receptor com prises
PT using an recombinant yeast expression library.
XX
PS Example 5; Col 63; 128pp; English.
XX
CC The specification describes a method for identifying a ligand for an
CC orphan G protein coupled receptor (GPCR). The method comprises ra pidly
CC screening large numbers of polypeptides in a yeast expression lib rary to

CC identify those polypeptides which induce or antagonise receptor
CC bioactivity. The method is useful for screening and identifying
CC pharmaceutically effective compounds that specifically interact w
ith and
CC modulate the activity of a cellular receptor or ion channel. The
assay is
CC particularly amenable for identifying surrogate ligands for orpha
n
CC receptors. The present sequence represents a pheromone analogue,
CC identified using the method of the invention
XX
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 4; Length 11;
Best Local Similarity 100.0%; Pred. No. 90;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

Qy 1 QVRF 4
||||
Db 4 QVRF 7

RESULT 11
ABU10263
ID ABU10263 standard; peptide; 11 AA.
XX
AC ABU10263;
XX
DT 28-JUL-2003 (first entry)
XX
DE Alpha-factor analogue peptide #2 from random peptide library.
XX
KW Engineered yeast cell; yeast pheromone system surrogate;
KW surrogate modulator; yeast pheromone system protein surrogate; tr
ait;
KW antifungal compound; antibiotic; alpha-factor pheromone; MFalpha1
.
XX
OS Synthetic.
XX
PN US2003008380-A1.
XX
PD 09-JAN-2003.
XX
PF 10-MAY-1999; 99US-00309196.
XX
PR 31-MAR-1993; 93US-00041431.

PR 31-JAN-1994; 94US-00190328.
PR 20-SEP-1994; 94US-00309313.
PR 13-OCT-1994; 94US-00322137.
XX
PA (FOWL/) FOWLKES D M.
PA (BROA/) BROACH J.
PA (MANF/) MANFREDI J.
PA (KLEI/) KLEIN C.
PA (MURP/) MURPHY A J.
PA (PAUL/) PAUL J.
PA (TRUE/) TRUEHEART J.
XX
PI Fowlkes DM, Broach J, Manfredi J, Klein C, Murphy AJ, Paul J
;
PI Trueheart J;
XX
DR WPI; 2003-416694/39.
DR N-PSDB; ACA61842.
XX
PT New yeast cell having a pheromone system, and which expresses a
PT heterologous surrogate of a yeast pheromone system, and a heterol
ogous
PT peptide, useful in the discovery of antifungal compounds.
XX
PS Example 5; Page 35; 71pp; English.
XX
CC The present invention relates to engineered yeast cells expressin
g a
CC heterologous surrogate of a yeast pheromone system, and a heterol
ogous
CC peptide that is a potential modulator of the surrogate. The surro
gate
CC performs a function naturally performed by the corresponding yeas
t
CC pheromone system protein, under at least some conditions. Inhibit
ion or
CC activation of the surrogate by the heterologous peptide affects a

CC selectable or screenable trait of the yeast cells. The yeast cell
s are
CC useful for producing pheromone system protein surrogates. They ar
e also
CC useful in the discovery of antifungal compounds, in describing th
e use of
CC Saccharomyces cerevisiae mutant strains, which are made highly se
nsitive
CC to a large range of antibiotics, and for the rapid detection of
CC antifungals. The present sequence represents an alpha-factor anal

```
ogue
CC   peptide from a random peptide library
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 20;  DB 6;  Length 11;
  Best Local Similarity   100.0%;  Pred. No. 90;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db          4 QVRF 7


RESULT 12
AAB35379
ID   AAB35379 standard; peptide; 12 AA.
XX
AC   AAB35379;
XX
DT   08-MAY-2001  (first entry)
XX
DE   Alpha3beta1 integrin binding peptide #44.
XX
KW   Alpha3beta1 integrin; angiogenesis; cell proliferation; cancer;
KW   diabetic retinopathy; restenosis; atherosclerosis; rheumatoid art
hritis;
KW   macular degeneration; psoriasis; cell adhesion; cell motility.
XX
OS   Synthetic.
XX
PN   WO200105812-A2.
XX
PD   25-JAN-2001.
XX
PF   12-JUL-2000; 2000WO-US018986.
XX
PR   15-JUL-1999;   99US-0144549P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Roberts DD,  Krutzsch HC;
XX
DR   WPI; 2001-182656/18.
XX
PT   New peptides that bind to or are recognized by alpha3-beta1 integ
rins,
```

PT useful for inhibiting cell adhesion to extracellular matrix, cell
PT motility and proliferation and for treating rheumatoid arthritis and
PT cancer.
XX
PS Claim 4; Page 34; 84pp; English.
XX
CC The present invention provides a number of peptides which bind to
CC alpha3beta1 integrins. They are useful in the modulation of cell adhesion
CC and motility, and in the treatment of cancer, diabetic retinopathy,
CC rheumatoid arthritis, macular degeneration, atherosclerosis, psoriasis
CC and restenosis. The present sequence is an example of one of the peptides
CC of the invention
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 20; DB 4; Length 12;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4
||||
Db 7 QVRF 10

RESULT 13
AAU96875
ID AAU96875 standard; peptide; 12 AA.
XX
AC AAU96875;
XX
DT 27-AUG-2002 (first entry)
XX
DE Human protein phosphatase 1 derived peptide #3.
XX
KW Human; protein phosphatase 1; PP1; target chemical compound;
KW peptide binding.
XX
OS Homo sapiens.
XX
PN JP2002058479-A.

XX
PD 26-FEB-2002.
XX
PF 14-AUG-2000; 2000JP-00245677.
XX
PR 14-AUG-2000; 2000JP-00245677.
XX
PA (CANO) CANON KK.
XX
DR WPI; 2002-447068/48.
XX
PT Determination and isolation of a structure recognizing amino acid
PT sequence that is capable of recognition of a target chemical substance.
XX
PS Example 1; Page 8; 18pp; Japanese.
XX
CC The invention relates to the determination of a structure recognising
CC amino acid sequence useful as a peptide capable of recognition and
CC selective binding with a target chemical compound in a living sample,
CC comprising: (1) screening of a peptide fraction solely adsorbed on a
CC carrier for the screening using 1st screening carrier with immobilised
CC target chemical substance from variable random amino acid sequence region
CC ; (2) screening of the peptide fraction, excluding peptide fraction
CC adsorbed on 2nd screening carrier from those selectively immobilised
CC other than the target chemical substance in the sample, from the peptide
CC groups adsorbed on the 1st screening step; (3) determination of the
CC screened amino acid sequence in the 2nd step capable of binding with the
CC target chemicals isolated in the 2nd step; and (4) determination of the
CC aimed amino acid sequence capable of structure recognition in the
CC elucidated peptides prepared by the preceding steps. The method is used
CC for selective screening of a peptide capable of binding with the target

Blank Sheet (USPTO)

CC chemical substance. The present sequence is a human protein phosp
hatase 1
CC (PP1) derived peptide used in an experiment demonstrating the met
hod of
CC the invention
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 20; DB 5; Length 12;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

Qy 1 QVRF 4
||||
Db 5 QVRF 8

RESULT 14
ABP76487
ID ABP76487 standard; peptide; 12 AA.
XX
AC ABP76487;
XX
DT 24-FEB-2003 (first entry)
XX
DE Peptidomimetic antimicrobial peptide related peptide SEQ ID NO:11
9.
XX
KW Template-fixed peptidomimetic; antimicrobial; beta-hairpin; cytos
tatic;
KW antibacterial; infection; cystic fibrosis; lung infection; malign
ant;
KW cancer; disinfectant; preservative.
XX
OS Synthetic.
XX
PN WO200270547-A1.
XX
PD 12-SEP-2002.
XX
PF 18-FEB-2002; 2002WO-EP001711.
XX
PR 23-FEB-2001; 2001WO-EP002072.
XX
PA (POLY-) POLYPHOR LTD.
PA (UYZU-) UNIV ZUERICH.
XX

PI Obrecht D, Robinson JA, Vrijbloed JW;
XX
DR WPI; 2003-103173/09.
XX
PT New beta-hairpin peptidomimetic compounds, useful for treating
PT infections, especially cystic fibrosis lung infections and cancer
, and as
PT disinfectants/preservatives for e.g. foodstuffs or cosmetics.
XX
PS Example; Page 161; 262pp; English.
XX
CC The present invention describes template-fixed beta-hairpin
CC peptidomimetic compounds (I) and (II). Also described: (1) prepar
ation of
CC (I) and (II); and (2) a modification of the preparation in which
CC enantiomers or all chiral starting materials are used. (I) and (I
I) have
CC antibacterial and cytostatic activities. The peptidomimetic compo
unds are
CC useful for treating or preventing infections or diseases related
to such
CC infections, especially cystic fibrosis lung infections; for prepa
ring
CC medicaments useful against malignant cells for treatment of cance
r; as
CC disinfectants or preservatives for foodstuffs, cosmetics, medicam
ents and
CC other nutrient-containing materials; and for preventing microbial

CC colonisation of surfaces. ABP76369 to ABP76677 represent peptide
CC sequences used in the exemplification of the present invention
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 20; DB 6; Length 12;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

```
Qy          1 QVRF 4
              ||||
Db          1 QVRF 4
```

RESULT 15
ABG72342
ID ABG72342 standard; peptide; 15 AA.
XX

AC ABG72342;
XX
DT 03-FEB-2003 (first entry)
XX
DE Human prostatic specific membrane antibody protein 8.91, N-termin
us.
XX
KW Human; prostatic specific membrane antibody protein 8.91;
KW prostatic cancer; benign prostatic tumour; tumour; haemopathy; HI
V;
KW human immunodeficiency virus infection; immunological disease;
KW inflammation.
XX
OS Homo sapiens.
XX
PN CN1352126-A.
XX
PD 05-JUN-2002.
XX
PF 06-NOV-2000; 2000CN-00127262.
XX
PR 06-NOV-2000; 2000CN-00127262.
XX
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-637134/69.
XX
PT New human prostatic specific membrane antibody protein 8.91 polyp
eptide
PT for treating e.g. prostatic cancer, benign prostatic tumor, hemop
athy,
PT human immunodeficieny virus infection, immunological diseases, an
d
PT inflammations.
XX
PS Example 5; Page 19 (disclosure); 34pp; Chinese.
XX
CC The present invention discloses a new kind of polypeptide, human
CC prostatic specific membrane antibody protein 8.91, polynucleotide
s
CC encoding the polypeptide and producing the protein by recombinant
DNA
CC technology. The present invention also discloses applying the pol
ypeptide
CC in treating various diseases, such as prostatic cancer, benign pr
ostatic

CC tumour, other tumours, haemopathy, human immunodeficiency virus (HIV)
CC infection, immunological diseases, inflammations. The present inv ention
CC also discloses the antagonist resisting the polypeptide and its t reatment
CC effect. The present invention also discloses application of the
CC polynucleotides encoding human prostatic specific membrane antibo dy
CC protein 8.91. The present sequence represents human prostatic spe cific
CC membrane antibody protein 8.91, N-terminus, used in an ELISA (enz yme-
CC linked immunosorbent assay) experiment
XX
SQ Sequence 15 AA;

Query Match 100.0%; Score 20; DB 5; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G aps 0;

```
Qy          1 QVRF 4
              ||||
Db          9 QVRF 12
```

RESULT 16
AAM17702
ID AAM17702 standard; protein; 33 AA.
XX
AC AAM17702;
XX
DT 12-OCT-2001 (first entry)
XX
DE Peptide #4136 encoded by probe for measuring cervical gene expres sion.
XX
KW Probe; human; microarray; gene expression; cervical epithelial ce ll;
KW cervical cancer.
XX
OS Homo sapiens.
XX
PN WO200157278-A2.
XX
PD 09-AUG-2001.
XX

PF 30-JAN-2001; 2001WO-US000670.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488901/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for a
nalyzing
PT gene expression in human cervical epithelial cells.
XX
PS Claim 27; SEQ ID NO 22528; 487pp; English.
XX
CC The present invention relates to human single exon nucleic acid p
robes
CC (SENP: see AAI10068-AAI28459). The present sequence is a peptide
encoded
CC by one such probe. The SENPs are derived from human HeLa cells. T
he SENPs
CC can be used to produce a single exon microarray, which can be use
d for
CC measuring human gene expression in a sample derived from human ce
rvical
CC epithelial cells. By measuring gene expression, the probes are th
erefore
CC useful in grading and/or staging of diseases of the cervix, notab
ly
CC cervical cancer. Note: The sequence data for this patent did not
form
CC part of the printed specification, but was obtained in electronic
format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

```
Qy          1 QVRF 4
              ||||
Db         24 QVRF 27
```

RESULT 17
ABB36725
ID ABB36725 standard; peptide; 33 AA.
XX
AC ABB36725;
XX
DT 04-FEB-2002 (first entry)
XX
DE Peptide #4231 encoded by human foetal liver single exon probe.
XX
KW Human; foetal liver; gene expression; single exon nucleic acid pr
obe.
XX
OS Homo sapiens.
XX
PN WO200157277-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000669.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483447/52.
XX
PT Human genome-derived single exon nucleic acid probes useful for a
nalyzing
PT gene expression in human fetal liver.
XX
PS Claim 27; SEQ ID NO 29360; 639pp + Sequence Listing; English.
XX
CC The invention relates to a single exon nucleic acid probe for mea

```
suring
CC   human gene expression in a sample derived from human foetal liver
. The
CC   single exon nucleic acid probes may be used for predicting, measu
ring and
CC   displaying gene expression in samples derived from human fetal li
ver. The
CC   present sequence is a peptide encoded by a single exon nucleic ac
id probe
CC   of the invention. Note: The sequence data for this patent did not
 form
CC   part of the printed specification, but was obtained in electronic
 format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 33 AA;

  Query Match             100.0%;  Score 20;  DB 4;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 2.9e+02;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db         24 QVRF 27


RESULT 18
AAM30216
ID   AAM30216 standard; protein; 33 AA.
XX
AC   AAM30216;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Peptide #4253 encoded by probe for measuring placental gene expre
ssion.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000663.
```

XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488897/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for a
nalyzing
PT gene expression in human placenta.
XX
PS Claim 27; SEQ ID NO 30485; 654pp; English.
XX
CC The present invention relates to single exon nucleic acid probes
(SENP:
CC see AAI31315-AAI57546). The present sequence is a peptide encoded
by one
CC such probe. The probes are useful for producing a microarray for
CC predicting, measuring and displaying gene expression in samples d
erived
CC from human placenta. The probes are useful for antenatal diagnosi
s of
CC human genetic disorders
XX
SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

```
Qy          1 QVRF 4
              ||||
Db         24 QVRF 27
```

RESULT 19
ABB31514
ID ABB31514 standard; peptide; 33 AA.
XX

AC ABB31514;
XX
DT 01-FEB-2002 (first entry)
XX
DE Peptide #4165 encoded by breast cell single exon nucleic acid probe.
XX
KW Human; microarray; single exon probe; gene expression; breast; disease;
KW cancer.
XX
OS Homo sapiens.
XX
PN WO200157271-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000662.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-496933/54.
XX
PT New spatially-addressable set of single exon nucleic acid probes, useful
PT for measuring gene expression in sample derived from human breast,
PT comprises number of single exon nucleic acid probes.
XX
PS Claim 27; SEQ ID NO 14482; 327pp + Sequence Listing; English.
XX
CC The invention relates to a spatially-addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human breast and BT 474 cells. The method involves contacting the
CC probes with a collection of detectably labelled nucleic acids der

```
ived
CC   from mRNA of human breast, and then measuring the label bound to
each
CC   probe of the microarray. The probes are useful for verifying the
CC   expression of regions of genomic DNA predicted to encode proteins
. They
CC   are useful for gene discovery, and for determining predisposition
 and/or
CC   prognosing breast disease. Gene expression analysis is useful for

CC   assessing the toxicity of chemical agents on cells. The microarra
y of
CC   this invention presents a far greater diversity of probes for mea
suring
CC   gene expression, with far less bias than expressed sequence tag
CC   microarrays. The method is suitable for rapid production of funct
ional
CC   information from genomic sequence. The present sequence is a pept
ide
CC   encoded by a single exon nucleic acid probe of the invention. Not
e: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly fro
m WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 33 AA;

  Query Match             100.0%;  Score 20;  DB 4;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 2.9e+02;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db         24 QVRF 27


RESULT 20
AAM05364
ID   AAM05364 standard; protein; 33 AA.
XX
AC   AAM05364;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Peptide #4046 encoded by probe for measuring breast gene expressi
on.
```

XX
KW Probe; human; breast disease; breast cancer; development disorder
;
KW inflammatory disease; proliferative breast disease; non-carcinoma
tumour.
XX
OS Homo sapiens.
XX
PN WO200157270-A2.
XX
PD 09-AUG-2001.
XX
PF 29-JAN-2001; 2001WO-US000661.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-476286/51.
XX
PT Novel single exon nucleic acid probe used to measuring gene expre
ssion in
PT a human breast.
XX
PS Claim 27; SEQ ID NO 14104; 322pp; English.
XX
CC The present invention relates to novel single exon nucleic acid p
robes
CC (see AAI00010-AAI10067). The present sequence is a peptide encode
d by one
CC such probe. The probes are useful for measuring human gene expres
sion in
CC a human breast sample, where the probe hybridises at high stringe
ncy to a
CC nucleic acid expressed in the human breast. The probes are useful
for
CC predicting, diagnosing, grading, staging, monitoring and prognosi
ng
CC diseases of the human breast, particularly those diseases with po
lygenic

```
CC   aetiology. The diseases include: breast cancer, disorders of deve
lopment,
CC   inflammatory diseases of the breast, fibrocystic changes, prolife
rative
CC   breast disease and non-carcinoma tumours. Note: The sequence data
 for
CC   this patent did not form part of the printed specification, but w
as
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 33 AA;

  Query Match             100.0%;  Score 20;  DB 4;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 2.9e+02;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db         24 QVRF 27


RESULT 21
AAY42735
ID   AAY42735 standard; peptide; 36 AA.
XX
AC   AAY42735;
XX
DT   20-DEC-1999  (first entry)
XX
DE   Human alpha-1-antitrypsin C-terminal peptide 3.
XX
KW   Alpha-1-antitrypsin; fragment; cholesterol; cleavage;
KW   low density lipoprotein; LDL; LDL receptor; hypercholesterolaemia
;
KW   atherosclerosis; gallstone.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Optionally N-terminally acetylated, tosyl
ated,
FT                   myristoylated, benzoylated or carbobenzoxylated"
XX
PN   WO9945940-A1.
```

XX
PD 16-SEP-1999.
XX
PF 10-MAR-1999; 99WO-US005139.
XX
PR 12-MAR-1998; 98US-00038935.
XX
PA (UYVI-) UNIV VIRGINIA COMMONWEALTH.
XX
PI Wright HT, Janciauskiene S;
XX
DR WPI; 1999-590819/50.
XX
PT Lowering cholesterol levels in a patient using hypocholesterolemi
c
PT peptide.
XX
PS Disclosure; Page 5; 28pp; English.
XX
CC This sequence represents human alpha-1-antitrysin C-terminal pept
ide
CC fragment 3. Alpha-1-antitrypsin is a known inhibitor of serine pr
oteases,
CC but loses its inhibitory activity due to a change in tertiary str
ucture
CC when cleaved by proteases such as leukocyte elastase. The cleaved
alpha-1
CC -antitrypsin molecules are cleared from the circulation through r
eceptors
CC in the liver and is accompanied by a depletion of extracellular
CC cholesterol. The cause of this cholesterol depletion is due to an

CC increase in the number of low density lipoprotein (LDL) receptors
in
CC liver cells which take up the LDL cholesterol complex. This inven
tion
CC takes advantage of the fact that there is an increase in LDL rece
ptor
CC levels induced by the presence of cleaved alpha-1-antitrypsin and
it
CC derivatives, including C-terminal peptide fragments. The C-termin
al
CC peptide fragments (AAY42733-Y42749) can be used to reduce the lev
els of
CC LDL cholesterol in a patient and can be used to treat a wide vari
ety of
CC disorders, including atherosclerosis, hypercholesterolaemia and
CC gallstones. As the peptides are derived from a naturally occurrin

g human
CC serum protein, they should not produce immune side effects
XX
SQ Sequence 36 AA;

Query Match 100.0%; Score 20; DB 2; Length 36;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4
||||
Db 3 QVRF 6

RESULT 22
ABP80500
ID ABP80500 standard; protein; 44 AA.
XX
AC ABP80500;
XX
DT 07-MAR-2003 (first entry)
XX
DE N. gonorrhoeae amino acid sequence SEQ ID 7530.
XX
KW Antibacterial; infection; vaccine; gene therapy.
XX
OS Neisseria gonorrhoeae.
XX
PN WO200279243-A2.
XX
PD 10-OCT-2002.
XX
PF 12-FEB-2002; 2002WO-IB002069.
XX
PR 12-FEB-2001; 2001GB-00003424.
XX
PA (CHIR-) CHIRON SPA.
XX
PI Fontana MR, Pizza M, Masignani V, Monaci E;
XX
DR WPI; 2003-058415/05.
DR N-PSDB; ABZ41470.
XX
PT New protein from Neisseria gonorrheae, useful for the manufacture of a
PT medicament for treating or preventing N. gonorrheae infection.
XX

PS Disclosure; Page 737; 815pp; English.
XX
CC The present invention relates to proteins from Neisseria gonorrhoeae.
CC Also disclosed are the nucleic acid molecules encoding the proteins and
CC antibodies that specifically bind to the proteins. The composition
CC comprising the protein, nucleic acid or antibody is useful for the
CC manufacture of a medicament for treating or preventing N. gonorrhoeae
CC infection, this may be in the form of a vaccine or gene therapy.
CC Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC molecules of the invention
XX
SQ Sequence 44 AA;

Query Match 100.0%; Score 20; DB 6; Length 44;
Best Local Similarity 100.0%; Pred. No. 4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4
||||
Db 31 QVRF 34

RESULT 23
ABP77440
ID ABP77440 standard; protein; 44 AA.
XX
AC ABP77440;
XX
DT 07-MAR-2003 (first entry)
XX
DE N. gonorrhoeae amino acid sequence SEQ ID 1410.
XX
KW Antibacterial; infection; vaccine; gene therapy.
XX
OS Neisseria gonorrhoeae.
XX
PN WO200279243-A2.
XX
PD 10-OCT-2002.
XX
PF 12-FEB-2002; 2002WO-IB002069.

XX
PR 12-FEB-2001; 2001GB-00003424.
XX
PA (CHIR-) CHIRON SPA.
XX
PI Fontana MR, Pizza M, Masignani V, Monaci E;
XX
DR WPI; 2003-058415/05.
DR N-PSDB; ABZ38410.
XX
PT New protein from Neisseria gonorrheae, useful for the manufacture of a
PT medicament for treating or preventing N. gonorrheae infection.
XX
PS Disclosure; Page 290; 815pp; English.
XX
CC The present invention relates to proteins from Neisseria gonorrhoeae.
CC Also disclosed are the nucleic acid molecules encoding the proteins and
CC antibodies that specifically bind to the proteins. The composition
CC comprising the protein, nucleic acid or antibody is useful for the
CC manufacture of a medicament for treating or preventing N. gonorrhoeae
CC infection, this may be in the form of a vaccine or gene therapy.
CC Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC molecules of the invention
XX
SQ Sequence 44 AA;

Query Match 100.0%; Score 20; DB 6; Length 44;
Best Local Similarity 100.0%; Pred. No. 4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 QVRF 4
              ||||
Db         31 QVRF 34
```

RESULT 24
AAB28082
ID AAB28082 standard; protein; 48 AA.
XX
AC AAB28082;

XX
DT 02-FEB-2001 (first entry)
XX
DE Human secreted protein BLAST search protein SEQ ID NO: 130.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antivi
ral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiu
lcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasit
ic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular d
isorder;
KW neurological disease; infection; human; secreted protein.
XX
OS Homo sapiens.
XX
PN WO200055177-A2.
XX
PD 21-SEP-2000.
XX
PF 09-MAR-2000; 2000WO-US006058.
XX
PR 12-MAR-1999; 99US-0124145P.
PR 03-DEC-1999; 99US-0168654P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Komatsoulis G;
XX
DR WPI; 2000-638177/61.
XX
PT Novel nucleic acids encoding 49 human secreted proteins useful fo
r
PT treating cancers, hyperproliferative disorders, inflammatory diso
rders,
PT neurological disorders and cardiovascular disorders.
XX
PS Disclosure; Page 376; 389pp; English.
XX
CC The invention relates to the isolation of genes AAC29108-C59156 e
ncoding
CC the human secreted proteins AAB28012-B28060. This sequence repres
ents a
CC fragment of the protein encoded by the gene given in the descript
or line.
CC The sequence is used as a query sequence for doing BLASTX searche
s to

CC determine homologous sequence to the protein. The genes and proteins are
CC useful for preventing, ameliorating or treating medical conditions, e.g.
CC by protein or gene therapy. The genes are isolated from a range of human
CC tissues disclosed in the specification. The nucleic acids, proteins,
CC antibodies and (ant)agonists are useful in the diagnosis, treatment and
CC prevention of: (a) cancer, e.g. breast and ovarian cancer, and other
CC cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal
CC tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's
CC disease, allergies, autoimmune haemolytic anaemia, autoimmune
CC thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis,
CC rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders
CC such as myocardial ischaemias; (d) wound healing; (e) neurological
CC diseases e.g. cerebral anoxia and epilepsy; and (f) infectious diseases
CC such as viral, bacterial, fungal and parasitic infections
XX
SQ Sequence 48 AA;

Query Match 100.0%; Score 20; DB 3; Length 48;
Best Local Similarity 100.0%; Pred. No. 4.4e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4
||||
Db 8 QVRF 11

RESULT 25
ABG21213
ID ABG21213 standard; protein; 50 AA.
XX
AC ABG21213;
XX
DT 18-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #21204.

XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS85400.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations

PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 51572; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and polypept
ide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chai
n
CC reaction (PCR) primers, oligomers, and for chromosome and gene ma
pping,
CC and in recombinant production of (II). The polynucleotides are al
so used
CC in diagnostics as expressed sequence tags for identifying express
ed
CC genes. (I) is useful in gene therapy techniques to restore normal

CC activity of (II) or to treat disease states involving (II). (II)
is
CC useful for generating antibodies against it, detecting or quantit
ating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical i

maging
CC of sites expressing (II). (I) and (II) are useful for treating di
sorders
CC involving aberrant protein expression or biological activity. The

CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations

CC responsible for genetic disorders or other traits to assess biodi
versity
CC and to produce other types of data and products dependent on DNA
and
CC amino acid sequences. ABG00010-ABG30377 represent novel human dia
gnostic
CC amino acid sequences of the invention. Note: The sequence data fo
r this
CC patent did not appear in the printed specification, but was obtai
ned in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 50 AA;

Query Match 100.0%; Score 20; DB 4; Length 50;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

Qy 1 QVRF 4
||||
Db 21 QVRF 24

RESULT 26
ABM65035
ID ABM65035 standard; protein; 50 AA.
XX
AC ABM65035;
XX
DT 20-OCT-2003 (first entry)
XX
DE Propionibacterium acnes immunogenic polypeptide #29711.
XX
KW Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
KW immunostimulant; immune response; vaccine; immunogenic.
XX
OS Propionibacterium acnes.
XX

PN WO2003033515-A1.
XX
PD 24-APR-2003.
XX
PF 11-OCT-2002; 2002WO-US032727.
XX
PR 15-OCT-2001; 2001US-00978825.
XX
PA (CORI-) CORIXA CORP.
XX
PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carte
r D;
PI Barth B, Vallieve-Douglass J;
XX
DR WPI; 2003-381789/36.
XX
PT New Propionibacterium acnes polypeptides and polynucleotides enco
ding the
PT polypeptide, useful for diagnosing, preventing or treating acne v
ulgaris,
PT or for stimulating an immune response specific for a P. acnes pro
tein.
XX
PS Claim 7; SEQ ID NO 29711; 1481pp; English.
XX
CC The invention relates to an isolated polynucleotide (ACF64435-ACF
64733)
CC encoding a Propionibacterium acnes protein. The invention also re
lates to
CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) a
nd to
CC immunogenic fragments of P. acnes polypeptides. The invention
CC additionally encompasses expression vectors and host cells compri
sing a
CC polynucleotide of the invention; antibodies against polypeptides
of the
CC invention; fusion proteins comprising a polypeptide of the invent
ion; a
CC method for stimulating an immune response specific for a P. acnes

CC polypeptide and an isolated T cell population comprising T cells
prepared
CC via this method; a vaccine composition (comprising P. acnes polyp
eptides,
CC polynucleotides, antibodies, fusion proteins, T cell populations,
or
CC antigen-presenting cells that express the polypeptide); a method

and kit
CC for detecting or determining the presence or absence of P. acnes in a
CC patient; and a method for inhibiting the development of P. acnes in a
CC patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion
CC proteins, T cell populations or antigen-presenting cells that exp ress the
CC polypeptides are useful for diagnosing, preventing or treating ac ne
CC vulgaris, or for stimulating an immune response specific for a P. acnes
CC protein. The polynucleotides can also be used as probes or primer s for
CC nucleic acid hybridisation. The vaccine composition is useful for the
CC stimulation of an immune response against P. acnes, or for treati ng acne,
CC and the kit is useful for performing a diagnostic assay. The pres ent
CC sequence represents a specifically claimed P. acnes polypeptide w hich is
CC thought to contain an immunogenic region. Note: The sequence data for
CC this patent did not form part of the printed specification, but w as
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 50 AA;

Query Match 100.0%; Score 20; DB 6; Length 50;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G aps 0;

```
Qy          1 QVRF 4
              ||||
Db          7 QVRF 10
```

RESULT 27
AAU66685
ID AAU66685 standard; protein; 53 AA.
XX
AC AAU66685;
XX

DT 13-FEB-2002 (first entry)
XX
DE Propionibacterium acnes immunogenic protein #27581.
XX
KW SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomye
litis;
KW uveitis; endophthalmitis; bone; joint; central nervous system; EL
ISA;
KW inflammatory lesion; acne vulgaris; enzyme linked immunosorbent a
ssay;
KW dermatological; osteopathic; neuroprotectant.
XX
OS Propionibacterium acnes.
XX
PN WO200181581-A2.
XX
PD 01-NOV-2001.
XX
PF 20-APR-2001; 2001WO-US012865.
XX
PR 21-APR-2000; 2000US-0199047P.
PR 02-JUN-2000; 2000US-0208841P.
PR 07-JUL-2000; 2000US-0216747P.
XX
PA (CORI-) CORIXA CORP.
XX
PI Skeiky YAW, Persing DH, Mitcham JL, Wang SS, Bhatia A;
PI L'maisonneuve J, Zhang Y, Jen S, Carter D;
XX
DR WPI; 2001-616774/71.
DR N-PSDB; AAS59748.
XX
PT Propionibacterium acnes polypeptides and nucleic acids useful for

PT vaccinating against and diagnosing infections, especially useful
for
PT treating acne vulgaris.
XX
PS Example 1; SEQ ID NO 27880; 1069pp; English.
XX
CC Sequences AAU39105-AAU68017 represent Propionibacterium acnes imm
unogenic
CC polypeptides. The proteins and their associated DNA sequences are
used in
CC the treatment, prevention and diagnosis of medical conditions cau
sed by
CC P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
CC pustulosis, hypertosis and osteomyelitis), uveitis and endophthal

mitis.
CC P. acnes is also involved in infections of bone, joints and the c
entral
CC nervous system, however it is particularly involved in the inflam
matory
CC lesions associated with acne vulgaris. A method for detecting the

CC presence or absence of P. acnes in a patient comprises contacting
a
CC sample with a binding agent that binds to the proteins of the inv
ention
CC and determining the amount of bound protein in the sample. The
CC polypeptides may be used as antigens in the production of antibod
ies
CC specific for P. acnes proteins. These antibodies can be used to
CC downregulate expression and activity of P. acnes polypeptides and

CC therefore treat P. acnes infections. The antibodies may also be u
sed as
CC diagnostic agents for determining P. acnes presence, for example,
by
CC enzyme linked immunosorbent assay (ELISA). Note: The sequence dat
a for
CC this patent did not form part of the printed specification, but w
as
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 4; Length 53;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

Qy 1 QVRF 4
||||
Db 27 QVRF 30

RESULT 28
AAU47836
ID AAU47836 standard; protein; 53 AA.
XX
AC AAU47836;
XX
DT 27-FEB-2002 (first entry)
XX

DE Propionibacterium acnes immunogenic protein #8732.
XX
KW SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomye
litis;
KW uveitis; endophthalmitis; bone; joint; central nervous system; EL
ISA;
KW inflammatory lesion; acne vulgaris; enzyme linked immunosorbent a
ssay;
KW dermatological; osteopathic; neuroprotectant.
XX
OS Propionibacterium acnes.
XX
PN WO200181581-A2.
XX
PD 01-NOV-2001.
XX
PF 20-APR-2001; 2001WO-US012865.
XX
PR 21-APR-2000; 2000US-0199047P.
PR 02-JUN-2000; 2000US-0208841P.
PR 07-JUL-2000; 2000US-0216747P.
XX
PA (CORI-) CORIXA CORP.
XX
PI Skeiky YAW, Persing DH, Mitcham JL, Wang SS, Bhatia A;
PI L'maisonneuve J, Zhang Y, Jen S, Carter D;
XX
DR WPI; 2001-616774/71.
DR N-PSDB; AAS59540.
XX
PT Propionibacterium acnes polypeptides and nucleic acids useful for

PT vaccinating against and diagnosing infections, especially useful
for
PT treating acne vulgaris.
XX
PS Example 1; SEQ ID NO 9031; 1069pp; English.
XX
CC Sequences AAU39105-AAU68017 represent Propionibacterium acnes imm
unogenic
CC polypeptides. The proteins and their associated DNA sequences are
used in
CC the treatment, prevention and diagnosis of medical conditions cau
sed by
CC P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
CC pustulosis, hypertosis and osteomyelitis), uveitis and endophthal
mitis.
CC P. acnes is also involved in infections of bone, joints and the c

entral
CC nervous system, however it is particularly involved in the inflam
matory
CC lesions associated with acne vulgaris. A method for detecting the

CC presence or absence of P. acnes in a patient comprises contacting
a
CC sample with a binding agent that binds to the proteins of the inv
ention
CC and determining the amount of bound protein in the sample. The
CC polypeptides may be used as antigens in the production of antibod
ies
CC specific for P. acnes proteins. These antibodies can be used to
CC downregulate expression and activity of P. acnes polypeptides and

CC therefore treat P. acnes infections. The antibodies may also be u
sed as
CC diagnostic agents for determining P. acnes presence, for example,
by
CC enzyme linked immunosorbent assay (ELISA). Note: The sequence dat
a for
CC this patent did not form part of the printed specification, but w
as
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 4; Length 53;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; G
aps 0;

Qy 1 QVRF 4
||||
Db 27 QVRF 30

RESULT 29
ABM44355
ID ABM44355 standard; protein; 53 AA.
XX
AC ABM44355;
XX
DT 20-OCT-2003 (first entry)
XX
DE Propionibacterium acnes predicted ORF-encoded polypeptide #9031.
XX

KW Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
KW immunostimulant; immune response; vaccine.
XX
OS Propionibacterium acnes.
XX
PN WO2003033515-A1.
XX
PD 24-APR-2003.
XX
PF 11-OCT-2002; 2002WO-US032727.
XX
PR 15-OCT-2001; 2001US-00978825.
XX
PA (CORI-) CORIXA CORP.
XX
PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carte
r D;
PI Barth B, Vallieve-Douglass J;
XX
DR WPI; 2003-381789/36.
DR N-PSDB; ACF64469.
XX
PT New Propionibacterium acnes polypeptides and polynucleotides enco
ding the
PT polypeptide, useful for diagnosing, preventing or treating acne v
ulgaris,
PT or for stimulating an immune response specific for a P. acnes pro
tein.
XX
PS Example 1; SEQ ID NO 9031; 1481pp; English.
XX
CC The invention relates to an isolated polynucleotide (ACF64435-ACF
64733)
CC encoding a Propionibacterium acnes protein. The invention also re
lates to
CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) a
nd to
CC immunogenic fragments of P. acnes polypeptides. The invention
CC additionally encompasses expression vectors and host cells compri
sing a
CC polynucleotide of the invention; antibodies against polypeptides
of the
CC invention; fusion proteins comprising a polypeptide of the invent
ion; a
CC method for stimulating an immune response specific for a P. acnes

CC polypeptide and an isolated T cell population comprising T cells

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prepared
CC   via this method; a vaccine composition (comprising P. acnes polyp
eptides,
CC   polynucleotides, antibodies, fusion proteins, T cell populations,
 or
CC   antigen-presenting cells that express the polypeptide); a method
and kit
CC   for detecting or determining the presence or absence of P. acnes
in a
CC   patient; and a method for inhibiting the development of P. acnes
in a
CC   patient. The P. acnes polypeptides, polynucleotides, antibodies,
fusion
CC   proteins, T cell populations or antigen-presenting cells that exp
ress the
CC   polypeptides are useful for diagnosing, preventing or treating ac
ne
CC   vulgaris, or for stimulating an immune response specific for a P.
 acnes
CC   protein. The polynucleotides can also be used as probes or primer
s for
CC   nucleic acid hybridisation. The vaccine composition is useful for
 the
CC   stimulation of an immune response against P. acnes, or for treati
ng acne,
CC   and the kit is useful for performing a diagnostic assay. The pres
ent
CC   sequence represents a polypeptide predicted to be encoded by an O
RF (open
CC   reading frame) contained within the P. acnes polynucleotides of t
he
CC   invention. Note: The sequence data for this patent did not form p
art of
CC   the printed specification, but was obtained in electronic format
directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 53 AA;

  Query Match             100.0%;  Score 20;  DB 6;  Length 53;
  Best Local Similarity   100.0%;  Pred. No. 4.9e+02;
  Matches    4;  Conservative    0;  Mismatches    0;  Indels    0;  G
aps    0;

Qy          1 QVRF 4
              ||||
Db         27 QVRF 30
```

RESULT 30
ABM63204
ID ABM63204 standard; protein; 53 AA.
XX
AC ABM63204;
XX
DT 20-OCT-2003 (first entry)
XX
DE Propionibacterium acnes predicted ORF-encoded polypeptide #27880.
XX
KW Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
KW immunostimulant; immune response; vaccine.
XX
OS Propionibacterium acnes.
XX
PN WO2003033515-A1.
XX
PD 24-APR-2003.
XX
PF 11-OCT-2002; 2002WO-US032727.
XX
PR 15-OCT-2001; 2001US-00978825.
XX
PA (CORI-) CORIXA CORP.
XX
PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carte
r D;
PI Barth B, Vallieve-Douglass J;
XX
DR WPI; 2003-381789/36.
DR N-PSDB; ACF64677.
XX
PT New Propionibacterium acnes polypeptides and polynucleotides enco
ding the
PT polypeptide, useful for diagnosing, preventing or treating acne v
ulgaris,
PT or for stimulating an immune response specific for a P. acnes pro
tein.
XX
PS Example 1; SEQ ID NO 27880; 1481pp; English.
XX
CC The invention relates to an isolated polynucleotide (ACF64435-ACF
64733)
CC encoding a Propionibacterium acnes protein. The invention also re
lates to
CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) a

nd to
CC immunogenic fragments of P. acnes polypeptides. The invention
CC additionally encompasses expression vectors and host cells compri
sing a
CC polynucleotide of the invention; antibodies against polypeptides
of the
CC invention; fusion proteins comprising a polypeptide of the invent
ion; a
CC method for stimulating an immune response specific for a P. acnes

CC polypeptide and an isolated T cell population comprising T cells
prepared
CC via this method; a vaccine composition (comprising P. acnes polyp
eptides,
CC polynucleotides, antibodies, fusion proteins, T cell populations,
or
CC antigen-presenting cells that express the polypeptide); a method
and kit
CC for detecting or determining the presence or absence of P. acnes
in a
CC patient; and a method for inhibiting the development of P. acnes
in a
CC patient. The P. acnes polypeptides, polynucleotides, antibodies,
fusion
CC proteins, T cell populations or antigen-presenting cells that exp
ress the
CC polypeptides are useful for diagnosing, preventing or treating ac
ne
CC vulgaris, or for stimulating an immune response specific for a P.
acnes
CC protein. The polynucleotides can also be used as probes or primer
s for
CC nucleic acid hybridisation. The vaccine composition is useful for
the
CC stimulation of an immune response against P. acnes, or for treati
ng acne,
CC and the kit is useful for performing a diagnostic assay. The pres
ent
CC sequence represents a polypeptide predicted to be encoded by an O
RF (open
CC reading frame) contained within the P. acnes polynucleotides of t
he
CC invention. Note: The sequence data for this patent did not form p
art of
CC the printed specification, but was obtained in electronic format
directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 6; Length 53;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 QVRF 4
              ||||
Db         27 QVRF 30
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RESULT 31
AAB23638
ID AAB23638 standard; protein; 54 AA.
XX
AC AAB23638;
XX
DT 12-JAN-2001 (first entry)
XX
DE Human secreted protein SEQ ID NO: 94.
XX
KW Human secreted protein; cytokine; cell proliferation;
KW nutritional supplement; immune modulation; autoimmune disorder;
KW haematopoiesis regulation; tissue growth; haemostasis; inflammation.
XX
OS Homo sapiens.
XX
PN WO200049134-A1.
XX
PD 24-AUG-2000.
XX
PF 18-FEB-2000; 2000WO-US004340.
XX
PR 19-FEB-1999; 99US-0120680P.
PR 23-APR-1999; 99US-00298733.
PR 17-AUG-1999; 99US-0149639P.
PR 23-SEP-1999; 99US-0155686P.
PR 01-OCT-1999; 99US-0157247P.
PR 29-NOV-1999; 99US-0167822P.
PR 29-NOV-1999; 99US-0167823P.
PR 15-FEB-2000; 2000US-0182711P.
XX
PA (ALPH-) ALPHAGENE INC.
XX
PI Valenzuela D, Yuan O, Hoffman H, Hall J, Rapiejko P;
XX